

Electronic supplementary information for Dalton Transaction

## Anticancer kiteplatin pyrophosphate derivatives show unexpected target selectivity for DNA

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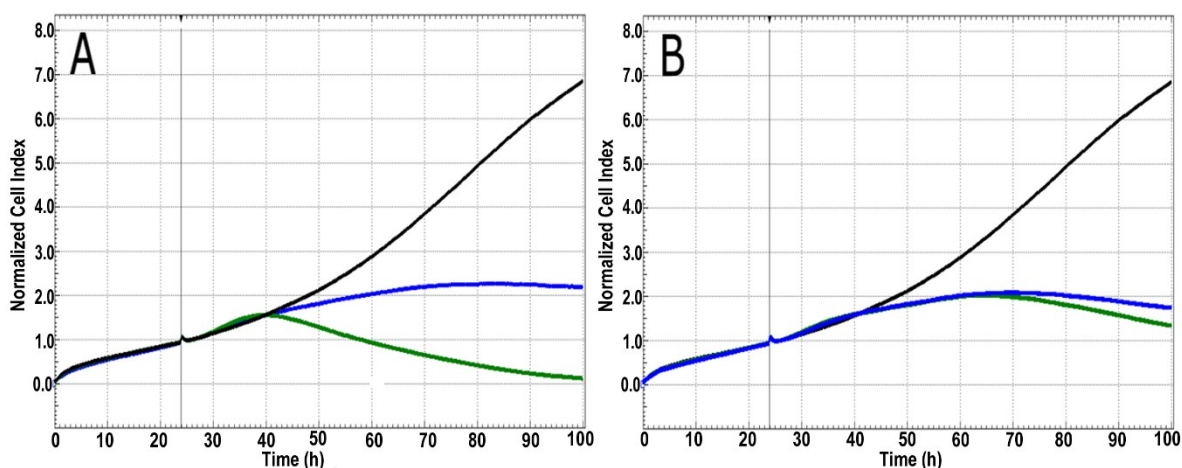
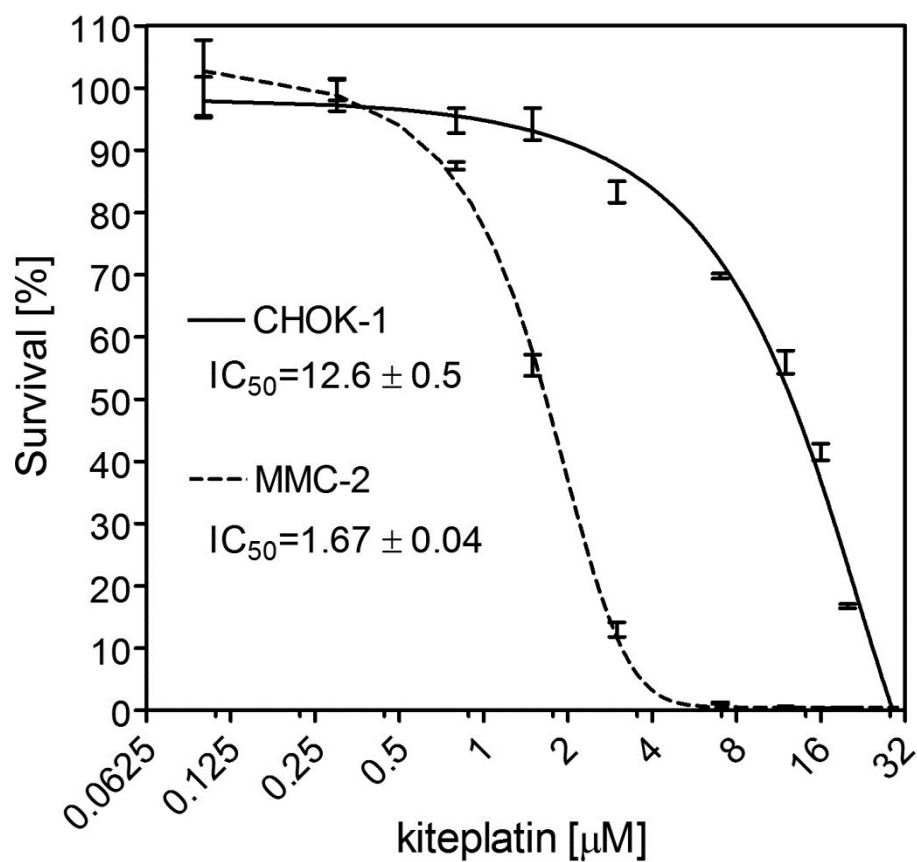
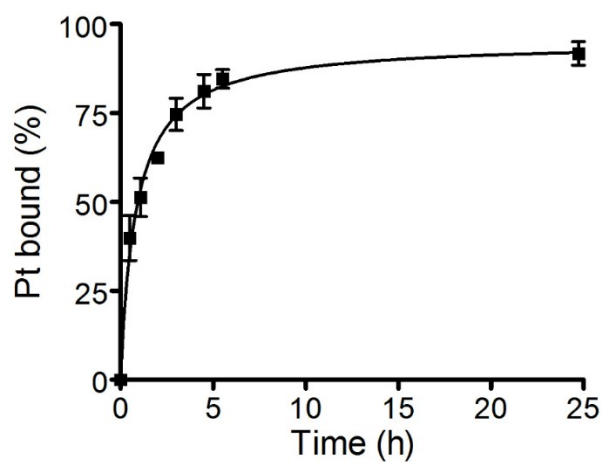


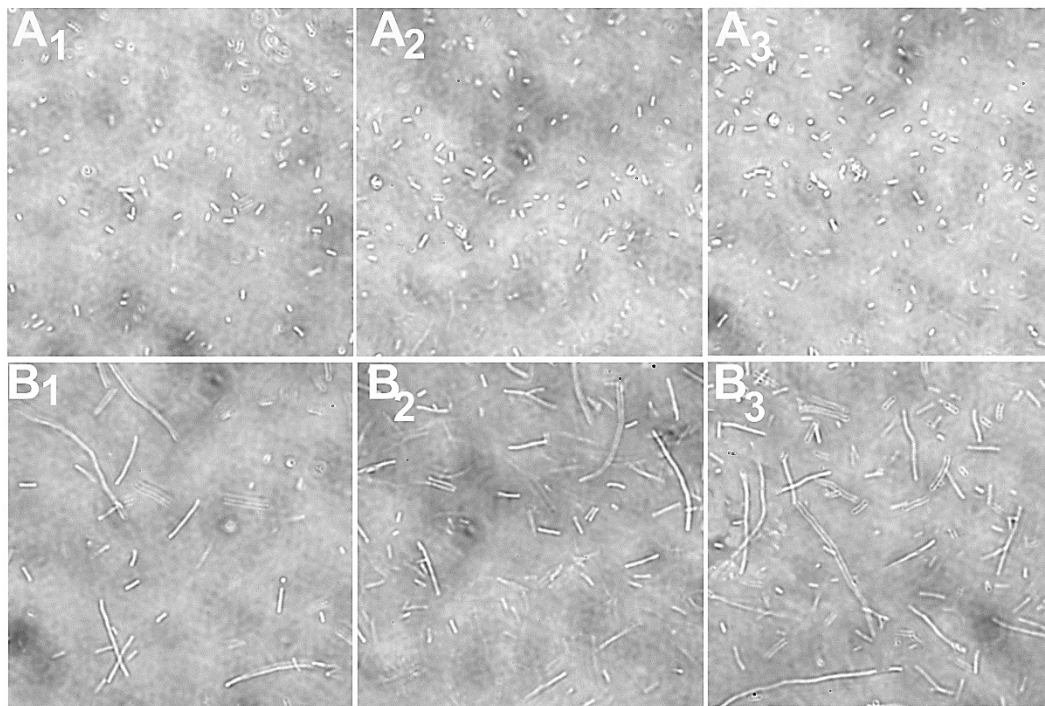
Figure S1: TRC profiles of A2780 cells treated with: A) equimolar (3  $\mu$ M) concentration of kiteplatin (green) and cisplatin (blue), B) equitoxic concentrations of kiteplatin (1  $\mu$ M, green) and cisplatin (5  $\mu$ M; blue). Untreated controls (black). The curves taken at equimolar concentrations (panel B) reflect the significantly higher cytotoxic efficiency of kiteplatin compared to cisplatin (see [Kasparkova, 2010 #370]).



**Fig. S2** Toxic effects of kiteplatin and cisplatin in CHO cells proficient (CHO-K1) or deficient (MMC-2) in nucleotide excision repair. The  $\text{IC}_{50}$  values are related to the concentration of the complex.



**Fig. S3** Kinetics of DNA platination when CT DNA is incubated with kiteplatin in 10 mM NaClO<sub>4</sub> at 37 °C. The time at which the binding reached 50% ( $t_{50\%}$ ) was  $58 \pm 5$  min, in agreement with already published result [Kasparkova, 2010 #370]. The symbols represent the average values of two independent experiments  $\pm$  SD.



**Fig. S4.** Effect of kiteplatin (panels B), on the morphology of *E. coli* K12 bacteria. Control, untreated bacteria are shown in the panels A. Three representative images of each sample are shown.